

After completing Level 1 students will be able to:

- Build a circuit with a variety of components.
- Identify the diagram symbols for a battery, LED, resistor, push button switch, and a potentiometer (POT).
- Recognize the parts of a breadboard and explain how it works.
- Correctly connect a battery to a circuit using a breadboard.
- Visualize how to build the same circuit in multiple ways as long as components are connected in the same order.
- Identify which leg of the LED is the anode (+) and which is the cathode (-) as well as which leg should be connected to power.
- Know how to test if an object is conductive (allows electricity to flow through it).
- Identify a resistor and how changing the resistance value affects the brightness of an LED circuit.
- Understand how a button switch controls the flow of electricity in a circuit.
- Combine simple circuits to build more complex circuits.

